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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,688	01/25/2001	Takashi Mochizuki	P/647-136	5364
32172	7590	04/27/2006	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 1177 AVENUE OF THE AMERICAS (6TH AVENUE) 41 ST FL. NEW YORK, NY 10036-2714			KUMAR, PANKAJ	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/769,688	MOCHIZUKI, TAKASHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Pankaj Kumar	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 4 is/are allowed.
- 6) ☒ Claim(s) 1 and 7 is/are rejected.
- 7) ☒ Claim(s) 2, 5, 6, 8, 9, 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 2/14/2006 have been fully considered but they are not persuasive.
2. Applicant agrees on page 3 4<sup>th</sup> paragraph that "In Maniwa, there are coefficients applied to minimize intermodulation distortion. However, these two coefficients ...". Hence applicant agrees that Maniwa teaches two coefficients.
3. Applicant goes on to write that these two coefficients do not provide the explicitly recited first and second attenuation amounts since (as per applicant's arguments on page 3) in Maniwa, 25 (a set of alpha and beta) affecting attenuation amount in 50 and 24 affecting 23 do not correspond to first and second attenuation amount since Maniwa is controlling the attenuation so that the sum of the attenuation amount outside the band in each of the predistorter 50 and transmitter 23 becomes a constant amount. This is not persuasive. What applicant has claimed is that there are two attenuation amounts. The fact that Maniwa has two attenuation amounts which applicant acknowledges are summed, means that Maniwa has two attenuation amounts – first and second attenuation amounts. The fact that Maniwa teaches two attenuation amounts are summed does not negate the fact that Maniwa teaches two attenuation amounts and in fact, it supports the fact that Maniwa teaches two attenuation amounts. The fact that Maniwa teaches two attenuation amounts are summed to control attenuation to a constant amount in Maniwa does not negate the fact that Maniwa teaches two attenuation amounts and in fact, it supports the fact that Maniwa teaches two attenuation amounts.

Art Unit: 2611

4. Applicant argues that the office action notes that this feature is not sufficiently disclosed in Maniwa. This is not persuasive. The office action did not note that this feature is not sufficiently disclosed in Maniwa. In fact, the office believes that this feature is sufficiently disclosed in Maniwa. However, if one were to not agree, then the office is providing another reference to teach the limitation.

5. Applicant argues on page 4 that “according to the present invention, the attenuation amount is selected in accordance with the use or nonuse situation of the adjacent band”. This is not persuasive since applicant has not claimed this limitation.

6. Applicant argues that descriptions relevant to the portions of cols. 1 (lines 13-15), 7 (line 54) to 8 (line 4) of Maniwa cited in the action is not seen. This is not persuasive. Col. 1 lines 13-15 recites “low adjacent-channel leakage power” which is related to applicant’s claim of reducing leakage power outside a transmission signal band (Maniwa’s channel adjacent to the transmission channel is adjacent or outside the transmission channel or band). Cols. 7 and 8 of Maniwa refer to subtracting portion of fft, two tones, alpha and beta coefficients varying which all relate to applicant’s claim of filtering and adjustable filtering.

7. Applicant’s argument with respect to the Beamish reference is irrelevant to applicant’s claim and to what the prior action discussed with respect to the Beamish reference. The Beamish reference teaches the limitations as taught in the prior action.

8. Applicant argues that motivation to combine references was not provided. This is not persuasive. Page 4 of the prior action recited “one of ordinary skill in the art, would have been motivated to combine the teachings of Maniwa with Akiya because Maniwa suggests adjusting coefficients (Maniwa alpha, beta) for use in restricting a frequency band (Maniwa figs. 7,8) and

Art Unit: 2611

hence adjusting attenuation (something broad) in general and Akiya suggests the beneficial use of adjusting attenuation by switching between two sets of values such as providing extra gain to compensate for power reduction (Akiya col. 1 lines 37-43) in the analogous art of attenuation.”

Page 4 also recited “one of ordinary skill in the art, would have been motivated to combine the teachings of Maniwa with Beamish because Maniwa suggests transmission, predistortion, and adjusting coefficients (Maniwa alpha, beta) for use in restricting a frequency band (Maniwa figs. 7,8) and hence filtering (something broad) in general and Beamish suggests the beneficial use of modulating and filtering for transmission such as removing higher order harmonics in order to avoid transmitting out of band energy (Beamish col. 2 lines 49-52) in the analogous art of transmission.”

***Response to Amendment***

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maniwa USPN 6,275,103 in view of Akiya USPN 5,752,171 and Beamish USPN 6,865,216. See prior action for details.

***Allowable Subject Matter***

11. Claims 3-4 are allowed. See a prior action for details.
12. Claims 2, 5, 6, 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
14. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2611

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (571) 272-3011. The examiner can normally be reached on Mon, Tues, Thurs and Fri after 8AM to after 6:30PM.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pankaj Kumar  
Patent Examiner  
Art Unit 2611

PK